DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012060 Address: 333 Burma Road **Date Inspected:** 30-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Liu Zhong An, Yu Dong Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 10

NORTH TOWER LIFT 4 C/D CORNER REPAIR (T-CWR533 REV. 1)

SMAW welding of weld joint 1A/B(Repair) located on NSTL4-3B/L.

Welder is identified as 056200. ZPMC QC is identified as Mr. Deng Zhi Bing.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-REPAIR.

NORTH TOWER LIFT 4 D/E CORNER REPAIR (T-CWR533 REV.1)

FCAW welding of weld joint 1A/B(Repair) located on NSTL4-3B/L.

Welder is identified as 066733. ZPMC QC is identified as Mr. Deng Zhi Bing.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR.

NORTH TOWER LIFT 2 DOUBLER PLATE BASE METAL REPAIR (T-CWR571)

During random in process verification, this QA Inspector observed that SMAW welding on the base metal of

WELDING INSPECTION REPORT

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Doubler plate of North Tower lift 2, skin E. Welder is identified as 066028. ZPMC QC is identified as Mr. Zhu Feng.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-1G(1F)-REPAIR.

NORTH TOWER LIFT 2

During random in process verification, this QA Inspector observed the installation of Strut plate on skin A of North Tower lift 2 at 65M elevation level. Attached photographs provide additional details.

BAY 11

TOWER STRUT FLANGE PLATE

SAW welding of weld joint 1B located on ND1-STSA4-6-139M-1.

Welder is identified as 040699. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

SAW welding of weld joint 1B located on ED1-STSA4-6-139M-2.

Welder is identified as 040699. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

During random in-process observations of the fabrication of North Tower lift2 ~ lift 3, skin B & skin D splice plates, this Quality Assurance (QA) inspector observed the deposition of weld metal (buttering/build up) by Shielded Metal Arc Welding (SMAW) process on the base metal edge of splice plates for skin B and skin D of North Tower lift 2 ~ lift 3. This base metal repair was performed without the approval of the Engineer. This build up was performed across the entire width of the edge and measured approximately 12mm thick and approximately 410mm in length. The material thickness is 50mm. The members are both identified as SA3-433. The members are located in Tower Bay 10.

The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer